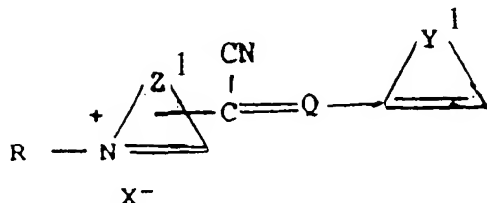


WHAT IS CLAIMED IS:

1. Unsymmetrical methane and polymethine dyes having the formula:



wherein R represents a group of from 1 to 25 carbon atoms and is selected from the group consisting of alkyl, alkenyl, aralkyl, hydroxyalkyl, alkoxyalkyl, aryloxyalkyl, aminoalkyl, carboxyalkyl, and arylthioalkyl, Z represents a group containing non-metallic atoms necessary to complete a heterocyclic or heteropolycyclic ring with the atoms to which it is attached and may contain at least one member selected from the group consisting of oxygen, nitrogen, selenium, and sulfur and up to 25 carbon atoms, and can be substituted with one or more substituents selected from the group of lower alkyl, nitro, halogen, carboxyl, sulfonic acid, amino and phosphoric groups, Y represents a group containing non-metallic atoms necessary to complete a cyclic or polycyclic ring with the atoms to which it is attached and may contain one or more members from the group consisting of nitrogen, oxygen, selenium, or sulfur and up to 25 carbon atoms and can be substituted with one or more substituents selected from the group consisting of lower alkyl, nitro, halogen, carboxylic, sulfonic, hydroxyl, primary amino, secondary amino groups, and wherein Q represents =CH-, =CH-CH=CH-, or =CH-CH=CH-CH=CH- groups.

2. The unsymmetrical methine and polymethine dyes of claim 1 wherein Q is =CH-.
3. The unsymmetrical methine and polymethine dyes of claim 1 wherein Q is =CH-CH=CH-.
4. The unsymmetrical methine and polymethine dyes of claim 1 wherein Q is =CH-CH=CH-CH=CH-.
5. The unsymmetrical methine dye of claim 1 which is 1-(2-carboxyethyl)-4-cyanomethyl-pyridinium iodide.
6. The unsymmetrical methane dye of claim 1 which is 4-[1-cyano-2-(4-dimethylamino)phenyl]ethenyl-1-(2-carboxyethyl)pyridinium iodide.

7. In a biological method wherein measurement of cellular properties is determined by the entry of a fluorescent dye into a cell and wherein it is necessary to remove excess dye which has not entered the cell before an accurate measurement can be made, the improvement which comprises utilizing as such dye an unsymmetrical methine or polymethine dye of claim 1.
8. The method of claim 7 wherein in the unsymmetrical methine and polymethine dyes Q is $=CH-$.
9. The method of claim 7 wherein in the unsymmetrical methine and polymethine dyes Q is $=CH-CH=CH-$.
10. The method of claim 7 wherein in the unsymmetrical methine and polymethine dyes Q is $=CH-CH=CH-CH=CH-$.
11. The method of claim 7 wherein the unsymmetrical methine dye is 1-(2-carboxyethyl)-4-cyanomethyl-pyridinium iodide.
12. The method of claim 7 wherein the unsymmetrical methine dye is 4-[1-cyano-2-(4-dimethylamino)phenyl]ethenyl-1-(2-carboxyethyl)pyridinium iodide.